## Vertebral Anomaly in Micropogon undulatus

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Vertebral anomalies have been observed in many fishes (Dawson, 1964, 1966). An Atlantic croaker, *Micropogon undulatus*, with a short vertebral column was reported by Gunter (1943). I am unaware, however, of any record of an abnormally flexed vertebral column for this species.

A humpbacked Atlantic croaker (Fig. 1) was captured in a 5-meter otter trawl in Escambia Bay, Florida, off Trout Bayou on 24 June 1964. This fish was the only humpback in 27,300 specimens of this species examined from August 1963 to December 1965. The fish, estimated to be about 6 months old, was plump, had a full



Fig. 1. Normal and humpbacked Atlantic croaker, 82 and 49 mm standard length, respectively, and x-ray of the humpbacked specimen.

intestinal tract, and could swim easily but was slower than normal fish.

Dissection of the fish and x-ray photographs revealed double dorso-ventral and lateral bends of the spinal column (Fig. 1); some vertebrae were bent but none were fused. Other anomalies, such as shifts in position of musculature, lateral line, and skin, were associated with the curved spinal column. Number of scales along (49), above (12), and below (16) the lateral line and number of vertebrae (25) were those of normal fish.

This specimen is currently in the museum collection of the Bureau of Commercial Fisheries Biological Field Station at Gulf Breeze, Florida (No. AN-1554).

## LITERATURE CITED

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